

**RULES
FOR THE CLASSIFICATION OF
SHIPS**

*Part 1 – GENERAL REQUIREMENTS
Chapter 5 – Surveys of Ships in Service
January 2019*

*Amendments No. 1
July 2019*

CROATIAN REGISTER OF SHIPPING

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By the decision of the General Committee of Croatian Register of Shipping,

Amendments No. 1 to the

RULES FOR THE CLASSIFICATION OF SHIPS

PART 1 – General Requirements, Chapter 5 – Surveys of Ships in Service, edition January 2019

have been adopted on 17th June 2019 and shall enter into force on 1st July 2019

INTRODUCTORY NOTES

These amendments are necessary to read together with the requirements in the Rules for the Classification of Ships, Part 1 – General Requirements, Chapter 5 – Surveys of Ships in Service, edition January 2019.

Table 1 contains review of amendments, where items changed or added in relating to previous edition are given, with short description of each modification or addition. All major changes throughout the text are shaded.

The purpose of issuing of these amendments is to provide compliance with IACS Unified Requirements UR Z18 (Jul 2018, rev. 8) and Z20 (Jul 2018, rev. 1), as well as to align wording with para. 5.10 of IMO Res. A.1120(30).

Chapter 5 SURVEYS OF SHIPS IN SERVICE

The subject Chapter of the Rules includes the requirements of the following international Organisations:

International Association of Classification Societies (IACS)

Unified Requirements (UR):	A1.6 (1992, rev. 5), F7 (May 1999, rev. 2), S1 (May 2010, rev. 7), S1A (May 2010, rev. 6), S8 (Dec 2010, rev. 4), S9 (De. 2010, rev. 6), S14 (Sep 2016, rev.6), S15 (Nov 2003, rev. 1), S19 (Jul 2004, rev. 5), S21 (May 2010, rev. 5) S23 (Aug 2007, rev. 4), Z1 (Apr 2016, rev. 6), Z3 (Jan 2018, rev. 7), Z6 (Jun 2015, rev. 6), Z7 (Jan 2018, rev. 26), Z7.1 (Aug. 2017, rev. 13), Z7.1 (Jan 2018, rev. 14), Z8 (1995, rev. 1), Z9 (1996, rev. 2, Corr. 1997), Z10.1 (Jan 2018, rev. 23), Z10.2 (Sep 2017, rev. 34; corr. 1 Sep 2019), Z10.2 (Jan 2018, rev. 35; corr. 1 Sep 2019), Z10.3 (Jan 2018, rev. 18), Z10.4 (Jan 2018, rev. 15), Z10.5 (Sep 2017, rev 17) , Z10.5 (Jan 2018, rev. 18) Z13 (Jan 2011, rev. 3), Z18 (Jul 2018, rev. 8), Z19 (Apr 1999), Z20 (Jul 2018, rev. 1) Z21 (Oct 2015, rev. 4), Z24 (Jul 2011, corr. 1)
Procedural Requirements:	PR No. 19 (Jul 2017, rev. 1), PR No. 20 (Apr 2016, rev. 2), PR No. 33 (Jul 2009), PR No. 37 (Dec 2018, rev. 2)
Unified Recommendations:	No. 36 (Aug 2011, rev. 2), No. 39 (Mar 2009, rev. 3), No. 72 (Apr 2007, rev. 2), No 77 (Oct 2016, rev. 3), No. 87 (May 2015, rev. 2), No. 111 (Feb 2010), No. 131 (Jul 2013), No. 133 (Nov 2013), No. 143 (Oct 2015), No. 144 (Feb 2016)
Unified Interpretations:	SC 249 (Feb 2013, rev. 1)

TABLE 1 - REVIEW OF AMENDMENTS

This review comprises amendments in relation to the Rules for the classification of ships, Part 1 - General requirements, Ch. 5 – Surveys of ships in service, edition January 2019.

<i>ITEM</i>	<i>DESCRIPTION OF THE AMENDMENTS</i>
SECTION 2 – TYPE OF SURVEYS	
Head 2.3.3 – Survey arrangement based on approved planned maintenance scheme for machinery	existing head has been amended
Head 2.4 – BOTTOM SURVEYS, item 2.4.1.6	new text added in order to align the wording with para. 5.10 of IMO Res. A.1120(30) “SURVEY GUIDELINES UNDER THE HARMONIZED SYSTEM OF SURVEY AND CERTIFICATION (HSSC)” existing item renumbered as 2.4.1.7
Head 2.4 – BOTTOM SURVEYS, item 2.4.1.7	item renumbered as 2.4.1.8
Head 2.4 – BOTTOM SURVEYS, item 2.4.1.8	item renumbered as 2.4.1.9

2 TYPE OF SURVEYS

■ Head **2.3.3 - Survey arrangement based on approved planned maintenance scheme for machinery**, has been amended and should be read as follows:

2.3.3 Survey arrangement based on approved planned maintenance scheme for machinery

2.3.3.1 For items of machinery and automation system which are subject to the Continuous machinery survey scheme (CSM, see 2.3.1) the *Register* may grant an approval of the planned maintenance scheme (PMS) and a survey arrangement adopted stating the extent and method of survey. This scheme is limited to components and systems covered by CSM.

2.3.3.2 Approved PMS considers surveys to be carried out on the basis of intervals between overhauls recommended by manufacturers, documented operator's experience and condition monitoring where fitted.

In general, the intervals for PMS shall not exceed those specified for CSM. However, for components where the maintenance is based on running hours longer intervals may be accepted as long as the intervals are based on the manufacturers recommendations.

2.3.3.3 The Chief Engineer is responsible person on board in charge with the PMS. Documentation on overhauls of items covered by the PMS shall be reported and signed by the chief engineer.

2.3.3.4 Any items not covered by the PMS shall be surveyed and credited in the usual way.

2.3.3.5 The approval of the PMS machinery shall be based on a concentrated description of the maintenance system sufficiently detailed to serve as basis for the approval.

The approval documentation is to be in the English language and is to be submitted by the Company.

2.3.3.6 To be considered for approval of a PMS, the Company is to make a formal request to the *Register* accompanied by the following information and documents:

- .1 Documentation to be submitted initially:
 - a) organisation chart identifying areas of responsibility,
 - b) documentation filling procedures,
 - c) listing of equipment to be considered by classification in PMS,
 - d) machinery identification procedure,
 - e) preventive maintenance sheet(s) for each machine to be considered,
 - f) listing and schedule of preventive maintenance procedures.
- .2 In addition to the above documentation the following information shall be available on board:
 - a) all clauses in 2.3.3.6.1 in an up-to-date fashion,
 - b) maintenance instructions (manufacturer's and/or shipyard's),
 - c) reference documentation (trend investigation procedures, etc.),
 - d) records of maintenance including repairs and renewals carried out.

2.3.3.7 An annual report covering the year's service, including the information **as required under the clauses c) and e), as well as the information on changes to other clauses in 2.3.3.6.1**, shall be given to the *Register* for review:

2.3.3.8 When the PMS is approved an approval document for survey arrangement will be issued for the vessel stating the extent and method of survey. The approval document is to be kept onboard.

2.3.3.9 The PMS shall be programmed and maintained by a computerised system. However, this may not be applied to the current already approved schemes.

The documentation used in the PMS in the form of books, set of cards, etc. are to be given a specific identification for later references.

Access to computerized systems for updating of the maintenance documentation and maintenance program shall only be permitted by the chief engineer or other authorized person. Computerised systems are to include back-up disks/tapes or CDs, which are to be updated at regular intervals. Computerised systems are to be approved by the *Register*.

2.3.3.10 The implementation survey shall be carried out to confirm the validity of the approval. The implementation survey shall be carried by the *Register's* Surveyor within one year from the date of approval **of the PMS**.

During the implementation survey the following shall be verified by a Surveyor to insure:

- .1 The PMS is implemented according to the approval documentation and is adapted to the type and complexity of the components/systems on board.
- .2 The PMS is producing the documentation required for the Annual Audit and the requirements of surveys and testing for retention of class are complied with.
- .3 The onboard personnel is familiar with the PMS.

When this survey is carried out and the implementation is found in order, a report describing the PMS shall be submitted to the *Register* and the approved PMS may replace the CSM.

2.3.3.11 An Annual Audit is to be carried out to maintain the validity of PMS. An Annual Audit shall be carried out by a *Register's* Surveyor and preferably concurrently with the annual survey of machinery.

During the Annual Audit the following shall be verified by a Surveyor:

- .1 The Surveyor shall review the annual report or verify that it has been reviewed by the *Register*.
- .2 The purpose of this survey shall be to verify that the scheme is being correctly operated and that the machinery has been functioning satisfactorily since the previous survey. A general examination of the items concerned shall be carried out.
- .3 The performance and maintenance records shall be examined to verify that the machinery has functioned satisfactorily since the previous survey or action has been taken in response of machinery operating parameters exceeding acceptable tolerances and the overhaul intervals have been maintained.
- .4 Written details of break-down or malfunction shall be made available.
- .5 Description of repairs carried out shall be examined. Any machinery part, which has been replaced by a spare one, due to damage, is to be retained on board-where possible-until examined by a *Register's* Surveyor.

Upon satisfactory completion of the above requirements, the *Register* shall retain the PMS.

2.3.3.12 The damage of components/machinery shall be reported to the *Register*. The repairs of such damaged components/machinery shall be carried out to the satisfaction of the Surveyor of the *Register*.

Any repair and corrective action regarding machinery under PMS system shall be recorded in the PMS logbook and repair verified by the Surveyor of the *Register* at the Annual Audit.

In the case of overdue outstanding recommendations or a record of unprepared damage which would affect the PMS the relevant items shall be kept out of the PMS until the recommendation is fulfilled or the repair is carried out.

2.3.3.13 The survey arrangement for machinery under PMS can be cancelled by the *Register* if PMS not being satisfactorily carried out either from the maintenance records or the general condition of the machinery, or when the agreed intervals between overhauls are exceeded, i.e. approval document will be withdrawn. The conditions for ordinary Continuous survey of machinery will then be introduced.

2.3.3.14 In case of sale or change of management of the vessel or transfer of class the *Register* will automatically cancel the approval document and the approval is to be reconsidered.

2.3.3.15 The ship Company may, at any time, cancel the survey arrangement for machinery under PMS by informing the *Register* in writing and for this case the items which have been inspected under the PMS since the last annual survey can be credited for class at the discretion of the attending Surveyor.

■ Head 2.4 - BOTTOM SURVEYS, item 2.4.1.6 has been amended and should be read as follows, with existing items up to 2.4.1.8 renumbered:

2.4.1.6 For passenger ships and up to 15 years of age, other than ro-ro passenger ships, and where acceptable to Flag State Administration, the minimum number of docking surveys (inspections in dry-dock of the outside of bottom) in any five-year period of class may be reduced from two to one. In such cases the interval between consecutive inspections in dry dock should not exceed 60 months.

2.4.1.7 For passenger ships made of steel and not engaged in international voyages (area of navigation 5 to 8) and up to 10 years of age, the docking survey may be carried out as specified in 2.4.1.1, based on special consideration of the *Register*.

2.4.1.8 Time intervals and due dates for Docking surveys are given in Table 6.1-1, and extent of requirements in 6.

2.4.1.9 If the Society with which the vessel is dually classed with applies different intervals for dry-docking surveys the *Register* may apply the requested interval of that Society.